

## Quarterly Progress Report

<b>Project Title:</b>	<b>Development of a Simulation/Assignment Model for an ITS Priority Corridor in New Jersey</b>		
<b>RFP Number:</b> 1999-27	<b>NJDOT Research Project Manager:</b> Karl Brodtmat, NJDOT		
<b>Task Order Number/Study Number:</b> NCTIP-32	<b>Pincipal Investigator:</b> Chien, Steven I-Jy		
<b>Period Starting:</b> 03/01/2001 - 05/31/2003 (Start-End Date of Study)	<b>Period Ending:</b> 04/04/2003		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Corridor Identification and Modeling Needs	9	0	100	9
Review of Existing Data Sources and Identification of Additional Data Needs	7	0	100	7
Modification of VISTA Simulation and Routing Models	12	0	100	11.4
Data Conversion and Input into the VISTA DB	6	0	100	6
Validation and Testing of the VISTA Simulation and Routing Models; Performance	6	0	100	6
Development of Two Tutorials and Training of the NJDOT Engineers in the VISTA environment	4	0	100	4
First Year Report with Documentation of the Simulation and Routing Models	4	0	100	4
Improvements to the Simulation and Routing Models based on the outcome of Task 6	16	0	100	16
Development of a Cost/Benefit Analysis Module for the NJDOT ITS Priority Corridor	16	20	30	4.8
Additional Data Needs and Conversion to the VISTA DB	4	10	90	3.6
Validation and Testing of the Cost/Benefit Analysis Module	6	50	60	3.6
Final Report, Enhancement of the Tutorial and Training	5	20	70	3.5
Final Report	5	50	60	3
<b>TOTAL</b>	<b>100 %</b>			<b>81.9 %</b>

### 1. Progress this quarter by task:

1. A two-day training workshop on the implementation of VISTA has been delivered. A comprehensive training material on the theory and functionality of VISTA has been delivered; December 2002.
2. A new DTA model has been calibrated that included several case studies: work zone study, weather condition study, air pollution study, bus preemption study, and VMS study.
3. A preliminary cost/benefit analysis module has been initiated.
4. A set of park and ride facilities close to the I-80 corridor have been

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incorporated into the VISTA system. A set of bus routes and train routes associated with the Park and Rides program have also been incorporated.

5. Work started in the implementation of VISTA to model a set of New Jersey Transit bus routes in Newark, NJ.

### 2. Proposed activities for next quarter by task:

1. Prepare the final workshop for NJDOT engineers and planners.
2. Complete the modules for cost/benefit analysis.
3. Incorporate the VISTA system to model New Jersey Transit bus routes in downtown Newark, NJ. This is in conjunction with the project sponsored by the Great Cities University Consortium (CCNY-CUNY), the TIDE center (NJIT).
4. Incorporate a sample of Park and Ride facilities into VISTA and emulate the bus and train routes that serve these facilities. This is in conjunction with the Park and Rides project of NJDOT.
5. Complete the final report.

### 3. List of deliverables provided in this quarter by task (product date):

### 4. Progress on implementation and training activities:

Prepare materials for the final workshop of this project at NJDOT  
Developing Cost/Benefit Analysis Module

### 5. Problems/proposed solutions:

The date for the workshop is not determined. We are waiting for the response from Mr. Patrick Vannozzi, NJDOT.

### 6. Budget summary:

Total Project Budget (# Years)	2 Year	\$375,100.00
Total Project Expenditure to date		\$325,200.00
% of Total Project Budget Expended		86.70%
Task Order Number/ Study Number	2 Year	NCTIP-32
Current Task Order Budget (# of Years)		\$375,100.00
Actual Expenditure to Date Against Current Task Order		\$325,200.00
% of Current Task Order Budget Expended		86.70%